Name:

at1110paper_practice_test (v31)

1. Expand the following expression into standard form.

$$(8x + 9)(7x - 3)$$

$56x^2 - 24x + 63x - 27$

$56x^2 + 39x - 27$

2. Solve the equation.

$$(3x + 2)(7x - 6) = 0$$

$x = \frac{-2}{3}$ $x = \frac{6}{7}$

3. Expand the following expression into standard form.

$$(5x + 6)(5x - 6)$$

$25x^2 - 30x + 30x - 36$

$25x^2 - 36$

4. Expand the following expression into standard form.

$$(5x + 6)^2$$

$25x^2 + 30x + 30x + 36$

$25x^2 + 60x + 36$

5. Factor the expression.

$$x^2 - 7x + 12$$

$(x - 4)(x - 3)$

6. Factor the expression.

$$16x^2 - 9$$

$(4x + 3)(4x - 3)$

7. Solve the equation with factoring by grouping.

$$10x^2 + 12x - 15x - 18 = 0$$

$(2x - 3)(5x + 6) = 0$

$x = \frac{3}{2} \qquad x = \frac{-6}{5}$

8. Solve the equation.

$$7x^2 - 15x - 50 = 4x^2 - 5x - 2$$

$3x^2 - 10x - 48 = 0$

$(3x + 8)(x - 6) = 0$

$x = \frac{-8}{3} \qquad x = 6$